

Title (en)

WARP-TIED COMPOSITE FORMING FABRIC

Title (de)

KETTVERBUNDENES MEHRLAGIGES FORMIERGEWEBE

Title (fr)

TOILE DE FORMATION COMPOSITE A FIL DE CHAINE A LIAGE

Publication

EP 1190131 B1 20040908 (EN)

Application

EP 00941838 A 20000627

Priority

- CA 0000763 W 20000627
- GB 9915015 A 19990629

Abstract (en)

[origin: US6581645B1] A composite forming fabric woven to a repeating pattern in at least 6 sheds; up to at least 36 sheds can be used. All of the paper side layer warp yarns are pairs of intrinsic warp binder yarns (101, 102) occupying an unbroken warp path in the paper side surface including three segments. The first and a second are occupied in turn by each intrinsic warp binder yarn (101, 102), and the third by both intrinsic warp binder yarns (101, 102) of a pair. The first, second and third segments are separated by at least one paper side layer weft, and a first or second segment is adjacent each end of the third segment. Within each first and second segment, each intrinsic warp binder yarn (101, 102) also interlaces once with a machine side layer weft (2', 9'), at the same point as a machine side layer warp (103) interlaces with the same weft (2', 9'). The weave path occupied by each member of a pair of intrinsic warp binder yarns (101, 102) can be the same or different. The segment lengths can be the same or different, and the machine side layer interlacing points can be regularly or irregularly spaced. After heat setting, the fabrics typically have a warp fill from about 110% to about 140%, an open area of at least 35% in the paper side surface, and an air permeability typically from about 3,500 to about 8,200 m³/m²/hr. Paper products made using these fabrics have enhanced printability.

IPC 1-7

D03D 11/00; D21F 1/00

IPC 8 full level

D03D 11/00 (2006.01); **D21F 1/00** (2006.01)

CPC (source: EP KR US)

D03D 11/00 (2013.01 - KR); **D21F 1/0036** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6581645 B1 20030624; AR 024626 A1 20021016; AT E275651 T1 20040915; AU 5667600 A 20010122; AU 778312 B2 20041125; BR 0012062 A 20020514; BR 0012062 B1 20100504; CA 2376991 A1 20010111; CA 2376991 C 20060110; CN 1223713 C 20051019; CN 1359432 A 20020717; DE 60013597 D1 20041014; DE 60013597 T2 20050210; EP 1190131 A1 20020327; EP 1190131 B1 20040908; ES 2226866 T3 20050401; GB 2351505 A 20010103; GB 9915015 D0 19990825; KR 100509727 B1 20050824; KR 20020041342 A 20020601; MY 125137 A 20060731; NO 20016410 D0 20011228; NO 20016410 L 20020115; NO 317618 B1 20041122; PL 198220 B1 20080630; PL 352510 A1 20030825; PT 1190131 E 20050131; WO 0102634 A1 20010111; ZA 200110370 B 20030318

DOCDB simple family (application)

US 92679401 A 20011220; AR P000103321 A 20000629; AT 00941838 T 20000627; AU 5667600 A 20000627; BR 0012062 A 20000627; CA 0000763 W 20000627; CA 2376991 A 20000627; CN 00809765 A 20000627; DE 60013597 T 20000627; EP 00941838 A 20000627; ES 00941838 T 20000627; GB 9915015 A 19990629; KR 20017016680 A 20011227; MY PI20002882 A 20000627; NO 20016410 A 20011228; PL 35251000 A 20000627; PT 00941838 T 20000627; ZA 200110370 A 20011218